

Lin
10/665,040

In the Claims

1. (currently amended) A brake rotor comprising:

a central mounting portion for mounting the brake rotor on a hub, said mounting portion having an annular wall having outer surfaces parallel to a central axis of said central mounting hub;

a first annular braking surface and a second annular braking surface, wherein each braking surface includes an inner diameter and an outer diameter;

a ~~solid~~ bridge in the form of a solid radially extending wall completely surrounding said central mounting portion ~~provided~~ between the annular wall of said central mounting portion and a ~~respective~~ an inner diameter of at least one ~~said~~ of the first and ~~second~~ the annular braking surfaces; and

a plurality of radially extending bridge reinforcing ribs positioned mounted on said proximate to the bridge between an inner diameter and said annular wall, wherein the central mounting portion, the braking surfaces, the bridge and the ribs are formed in a single piece.

2. (previously presented) The brake rotor according to claim 1, wherein at least a portion of at least one rib protrudes above a surface of the bridge.

3. (currently amended) The brake rotor according to claim 1 wherein said bridge reinforcing ribs extend into a space between said first and second annular braking surfaces the bridge includes a plurality of openings.

4. (currently amended) The brake rotor according to claim 3, wherein said bridge reinforcing ribs extend between brake surface reinforcing ribs located between said first and second annular braking surfaces, said brake surface reinforcing ribs extending between inner and outer diameters of said first and second annular braking surfaces the plurality of

Lin
10/665,040

~~ribs are flush with one or both of the first and the second annular braking surfaces.~~

5. (canceled)

6. (original) The brake rotor according to claim 1, wherein either or both of the annular braking surfaces includes one or more slots.

7. (original) The brake rotor according claim 1, further comprising one or more pairs of openings, each pair of openings allowing communication between the first annular braking surface and the second annular braking surface.

8. (original) The rotor according to claim 1, further comprising a hat portion disposed in the central mounting portion and adapted for mounting the rotor to a vehicle;

9. (previously presented) The rotor according to claim 1, wherein a first opening allows the first annular surface to fluid communicate with a vent.

10. (original) The rotor according to claim 1, wherein the central mounting portion comprises a hat having a plurality of openings for receiving fasteners from the hub or a plurality of fasteners for fastening a wheel to the hub and rotor combination.

11. (original) The rotor according to claim 1, further comprising a cover for covering all or a portion of the bridge.

12. (original) The rotor according to claim 11, wherein the cover comprises a circular piece of material having a central opening corresponding in size to the central mounting portion of the rotor, wherein upon mounting of the cover onto the rotor, the central opening receives the central mounting portion of the rotor.

13. (original) The rotor according to claim 12, wherein the cover includes a plurality of fastening openings for receiving fasteners for fastening the cover to the rotor.

14. (currently amended) A brake rotor comprising:

a central mounting portion for mounting the brake rotor onto a hub;

a first annular braking surface and a second annular braking surface, wherein each

Lin
10/665,040

braking surface includes an inner diameter and an outer diameter;

a plurality of flow channels provided between the first annular braking surface and the second annular braking surface;

a solid bridge in the form of a solid radially extending wall completely surrounding and perpendicular to an outer surface of said central mounting portion extending provided between the central mounting portion and a respective an inner diameter of at least one of said the first and the second annular braking surfaces; and

a plurality of radially extending ribs positioned mounted on the bridge, wherein the central mounting portion, the braking surfaces, the bridge and the ribs are formed in a single piece.

15. (original) The brake rotor according to claim 14, wherein each flow channel includes at least one wall.

16. (original) The brake rotor according to claim 15, wherein the at least one wall comprises one of the plurality of ribs.

17. (original) The brake rotor according to claim 14, wherein at least one of the plurality of ribs extend above a surface of the bridge.

18. (currently amended) The brake rotor according to claim 14, further comprising a plurality of openings positioned in the bridge between said ribs.

19. (original) The rotor according to claim 14, further comprising a cover for covering all or a portion of the bridge.

20. (original) The rotor according to claim 19, wherein the cover comprises a circular piece of material having a central opening corresponding in size to the central mounting portion of the rotor, wherein upon mounting of the cover onto the rotor, the central opening receives the central mounting portion of the rotor.

21. (original) The rotor according to claim 20, wherein the cover includes a plurality of

Lin
10/665,040

fastening openings for receiving fasteners for fastening the cover to the rotor.

22. (currently amended) A braking system comprising;

a brake rotor comprising:

a central mounting portion for mounting the brake rotor on a hub;

a first annular braking surface and a second annular braking surface, wherein each braking surface includes an inner diameter and an outer diameter;

a bridge in the form of a radially extending wall completely surrounding and at right angle to an outer surface of said central mounting portion extending provided between the central mounting portion and an a-respective inner diameter of at least one of said the first and the second annular braking surfaces; and

spaced openings in said plurality of ribs positioned proximate to the bridge, wherein the central mounting portion, the braking surfaces, and the bridge and the ribs are formed in a single piece.

23. (original) The braking system according to claim 22, further comprising a cover for covering all or a portion of the bridge.

24. (original) The braking system according to claim 23, wherein the cover comprises a circular piece of material having a central opening corresponding in size to the central mounting portion of the rotor wherein upon mounting of the cover onto the rotor, the central opening receives the central mounting portion of the rotor.

25. (original) The braking system according to claim 24, wherein the cover includes a plurality of fastening openings for receiving fasteners for fastening the cover to the rotor.

23-29. (canceled)